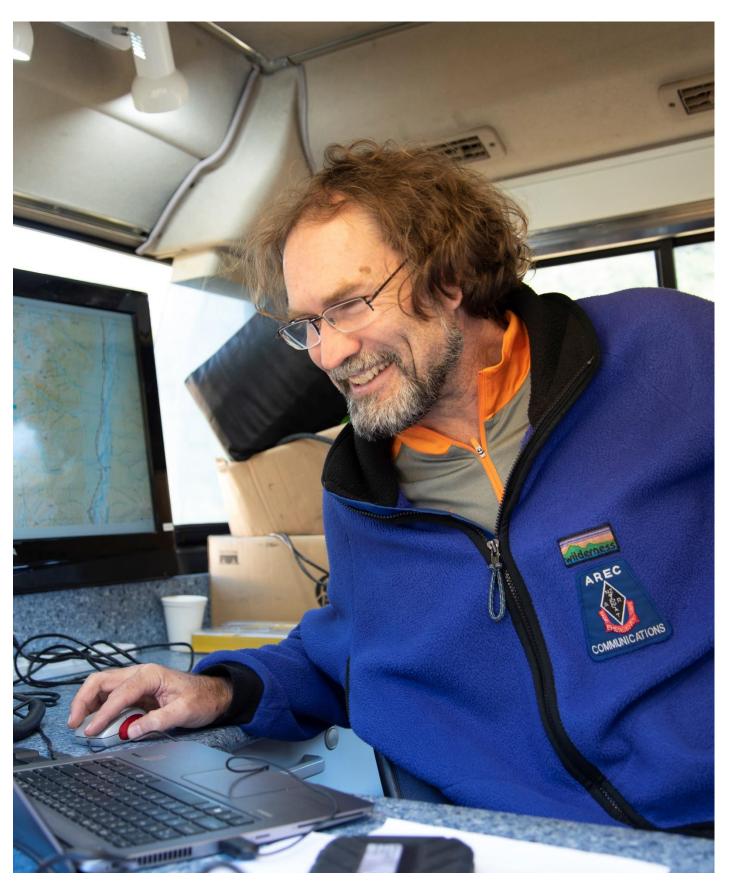


Monthly newsletter of Amateur Radio Emergency Communications

MAY 2021



AREC.info is the newsletter of Amateur Radio Emergency Communications, the public service arm of the New Zealand Association of Radio Transmitters. AREC.info is published monthly (except January).



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Cover:

Steve Davis ZL2UCX at the Police National SAR Course held at Dip Flat during April.



AREC Administration – Debbie and Annalise admin@arec.nz, 04 939 2189

Newsletter Editor - Soren Low, ZL1SKL newsletter@arec.nz, 021 813 541

National Training Manager Steve Davis, ZL2UCX training@arec.nz, 027 436 1796

Health & Safety Advisor Dave Wilkins, ZL1MR hsw@arec.nz, 021 185 7903

Treasurer - Evan Sayer Treasurer@arec.nz, 021 612 164

District Managers:

Northland/Auckland - Richard Gamble DMAuckland@arec.nz, 021 729 270

Bay of Plenty – Karl Hunt DMBOP@arec.nz, 021 167 0477

Central - Brian Purdie DMCentral@arec.nz, 027 321 4470

Eastern – John Newson DMEastern@arec.nz , 027 230 3642

Wellington – John Murphy DMWellington@arec.nz, 021 0807 5075

Tasman - Paul Rennie DMTasman@arec.nz, 027 458 9740

Canterbury - Geoff Chapman DMCanterbury@arec.nz, 021 246 9128

Southern - Lindsay Eunson DMSouthern @arec.nz, 027 432 5136



Hello again, welcome to another newsletter. This has been another busy month with plenty to report.

Firstly, I recently attended the SAR Sector Innovation Technology Workshop with representatives from the SAR sector Volunteer organisations. We were led by KPMG consultants through a process to define the Innovation in Technology Strategy, objectives and tasks. A great session with a draft strategy now under review prior to publication.

Your National Management Team meets quarterly via Microsoft Teams, and we have just had our most recent session. These meetings are important to ensure we are continuing to deliver against our strategic direction and ensure we can support our partners and members. Developing and growing our members is a key topic of our discussions.

On the subject of our management structure, I have completed a review of job descriptions of all management roles across AREC. I often get asked about our positions, what they are responsible for and how we measure our success – this review is to ensure that this is clear and transparent. These will be tabled for sign-off at the upcoming AREC Summit in Napier.

Lindsey ZL4KS, Andy ZL1COP and I attended the SAR Volunteer workshop hosted at Coastguard in Auckland over a day and a half. Coastguard put on a marine SAREX for us that enabled us to see how a SAR operation works in their environment. A presentation was provided by all the volunteer groups attending on their organisations progress on managing volunteers. A couple of very experienced representatives from FENZ provided valuable information on their journey as woman in FENZ. A great session. You will read Andy's report on the SAREX in this issue, and more photos can be found here NZART AREC Emergency Fund Trust - Coastguard SAREX Auckland - Thumbnails (sharepoint.com)

The photo at the top of the page was taken at the recent Comms Connect conference held in Lower Hutt. This is the annual communications industry conference and is attended by manufacturers, sellers and users of radio equipment from New Zealand and Australia. On the second day, I gave a presentation on AREC which was well received by the audience.

It was also good to meet up with some of our AREC members who were attending the conference in their various professional capacities.

I am also very pleased to see the implementation of our new membership system and finance systems is underway. These are important systems for any organisation.

Finally, I look forward to meeting those of you who are attending the NZART Conference in Napier over Queen's Birthday Weekend. As usual, we will be holding an AREC forum on Saturday afternoon and all are welcome to attend.

Don, ZL2TYR, Chief Executive Officer, AREC



The Police National SAR course is held most years at the RNZAF training facility at Dip Flat, located at the base of the Saint Arnaud Range. The purpose of the course is to equip Police Search & Rescue squad members with the skills they will require to lead and participate in SAR activities.

Police SAR members and their trainers came from all around New Zealand to attend this year's event.

The course itself goes for two weeks, with participants arriving on Monday morning and leaving 12-days later on the following Friday. It is an intensive programme; starting off with equipment training, theory and search management sessions. The second week includes a three-day SAREX. The Incident Management Team (IMT) members are picked from the participants who then direct field teams in search of two missing groups.

AREC have been supporting the course for a number of years now, with this being coordinated by Christchurch Branch 05. Our role is to provide advice around meeting their radio communication needs and to provide radio operators and logging for IMT.

This year we had a core team of five members; Steve Davis ZL2UCX and Dave Hadler ZL3TRX from Christchurch Branch 05, Paul Rennie ZL2RE and Graeme McKay ZL1BDS from Marlborough Branch 22 and myself from Auckland Branch 02. We were also lucky to work with Garth Haylock ZL3HK, also from Branch 22. Grant was there as part of his day job however was able to help us out when duties allowed.

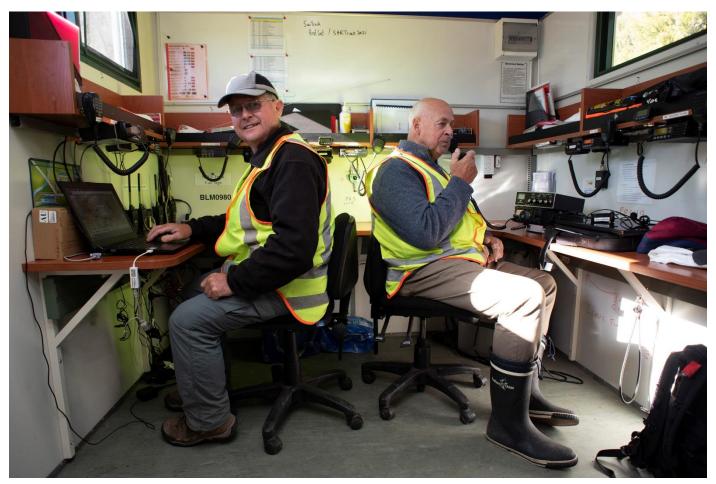


Above: The Team; Soren ZL1SKL, Graeme ZL1BDS, Steve ZL2UCX, Dave ZL3TRX, Paul ZL2RE.

We arrived on the Friday, by which point the course had been underway for five days. I flew into Blenheim and travelled over with Paul and Graeme and soon met up with Steve and Dave who had driven up from Christchurch.

The IMT was situated in the main building at Dip Flat and VHF radio was run from the Branch 05 Civilian with HF radio run from The Marlborough Emergency Management Communications Unit. Both vehicles are very well equipped with radios and antennas covering most bands. The requirement to use the vehicles was to keep the radio chatter out of IMT – but also to allow separation between VHF and HF comms.

The Branch 05 Civilian was parked nearby to IMT while the Marlborough truck was parked in a nearby paddock to be clear of noise on HF. The three locations were joined by Wi-Fi which enabled us to use SARTrack.



<u>Above</u>: Graeme ZL1BDS and Paul ZL2RE operate the HF stations from the Marlborough Emergency Management truck. This vehicle is very well appointed with radios across most common bands, a generator, kitchen and plenty of storage. In between duties, Paul maintained regular skeds back to Blenheim on 80m.



The purpose of the course was to teach the fundamentals of Search & Rescue, so the IMT team did not use SARTrack (learn the core skills first and add the technology later).

However, this was a great learning opportunity for us as well so we used the system between ourselves. We had an AREC member in IMT who was using SARTrack to manage messages to/from IMT.

<u>Left</u>: The AREC Icom IC-F7000 in the Marlborough Truck.

The first couple of days were reasonably quiet for us. It gave us an opportunity to get everything set-up, familiarise ourselves with the equipment and get ready for the field activities. The first of these was an all-day field navigation activity which saw teams walk from Dip Flat, over the Saint Arnaud Range to Saint Arnaud township. Teams were required to check-in on regular skeds – these started out of VHF and moved to HF when they started down the other side of the range and line-of-sight was lost.



Monday saw the arrival of the RNZAF NH-90 helicopter and crew. The purpose of the NH-90 was to transport teams and equipment (including radio repeaters) into and out of the search area. After a briefing, Police team members were winched in and out of the helicopter to build competence and confidence ahead of field deployment.





Tuesday morning was the start of the SAREX. The first job was to deploy the Police SAR portable repeaters; this was done by members of the IMT with the RNZAF NH-90 providing transport. Locations and coverage of the three repeaters (two standard and one linking) had been determined previously by Richard Smart ZL4FZ.

These self-contained repeaters include a pair of handheld radios, duplexer, battery and are supplied with a pole, guys and antenna for easy deployment. The Yellow box is a standard repeater and the Green box can either be used stand-alone or used to link two standard repeaters and provide extended coverage.

Field teams were deployed with standard Police VHF hand-held radios and POLSAR HF radios.

After the repeaters were deployed, the field deployment started with the NH-90 moving teams out to locations as directed by the IMT. From this time on, we started logging messages between IMT, the helicopter and field teams through SARTrack.

Communication with the field teams was through the ES-band repeaters or on HF 3023kHz and 5680kHz, the NH-90 on MSX27 and we used UHF simplex at base.

Towards the end of the first day, a simulated failure of the VHF radio system occurred. This forced teams to use HF radio for their evening sked. Paul and Graeme did a great job of working these stations – including sending an outbound message that had to be received, understood and acknowledged, across wildly varying quality of signals.

The HF station consisted of two dipole antennas (one for each frequency) end-on-end into two radios in the Marlborough truck. Both "day" and "night" frequencies were monitored from this location throughout the day on each day of the exercise. Siting of this was a compromise between keeping away from HF noise and also being out of the way from the comings and goings of the helicopter.

The Branch 05 Civilian was the mainly used for VHF communications to the field teams and NH-90, although both vehicles were set-up to pass both HF and VHF traffic.

As Dip Flat is out of cellphone coverage, Branch 05 brough their VSAT satellite internet equipment with them. This provided an opportunity to demonstrate how we can help organisations keep connected when normal options aren't available. It was also a useful way to connect back in to the outside world from time to time!

On the second day, new taskings were passed to us through SARTrack and delivered to the field by HF and VHF radio.

As the SAREX moved along, the pace quickened with clues and sign helping IMT narrow-down the search area and ultimately re-deploy resources by foot and air.

Eventually the lost parties were found safe and sound and the search teams settled in for their last night in the field before being extracted by helicopter the next morning.



Above: Dave Hadler ZL3TRX operating from the Civilian.

<u>Below</u>: Graeme ZL1BDS and Paul ZL2RE take a break from their tasks to stand for a photo. Branch 22 have an excellent relationship with Marlborough Emergency Management which allows them to use their "Communications Unit" for community activities and events.



For me Dip Flat was a really enjoyable week away. It was an opportunity to connect with fellow AREC members and learn how they do things in their areas, as well as spend time with Police and get a better understanding of how Search & Rescue is supported and executed. What impressed me most was the great can-do attitude shown by everyone who was there. For the course participants, there were no days off and the programme was full-on every day.

I would like to acknowledge and say thank you to Steve Davis ZL2UCX, the AREC event coordinator and our Team Leader, to Graeme, Paul, Dave and Garth – what a great bunch to work with, and of course Police and the Royal New Zealand Air Force who made us feel so welcome and part of the wider team.



<u>Left</u>: Police POLSAR HF radios and antennas as used by field teams.

These radios have two channels fitted; 5680kHz "Day" and 3023kHz "Night".



<u>Left</u>: Also at Dip Flat was the new Police SAR repeater manufactured by Tait. This includes two TP9300 series radios, lithium battery and charging circuitry, duplexer and interfaces.

The repeater is capable of operating in digital or analogue mode.

<u>Below</u>: The morning of departure. The Marlborough truck and the Branch 05 Civilian are prepared for their trips home.



On 11-12 May 2021, AREC CEO Don Robertson ZL2TYR and Regional Managers Lindsay Ross ZL4KS and Andy Brill ZL1COP attended a workshop for volunteer Search and Rescue organisations run by the NZ Search and Rescue Secretariat (NZSAR) and Hosted by Coastguard NZ at the Auckland Marine Rescue Centre. Participants were from Coastguard, Surf Lifesaving NZ, LandSAR, AREC and NZSAR.



On the first day participants were able to observe a Coastguard SAREX which formed part of the training and qualification of a new Coastguard On-Scene commander. The scenario involved three people in the water from a distressed vessel near Motuihe Island in the Hauraki Gulf. Coastguard used three vessels in the exercise, - Trillian Trust Rescue, a large Naiad designed rescue vessel powered by twin 700 HP Scania diesel engines which provided the command platform, and two Quick Response rescue vessels (QRVs), North Shore Rescue, and Howick Rescue. The operation was controlled from the Coastguard operations room at the Marine Rescue Centre. Communications were conducted using a combination of Marine VHF repeaters, VHF simplex for coordination of line search and shore parties and UHF digital comms for coordination with MRC. The exercise lasted about two hours, and the victims were all located – one floating at sea and two survivors on Motuihe Island.





AREC Regional Manager



AREC currently have a vacancy for the role of Regional Manager for the Lower North Island, Central Region.

As one of three, the Regional Manager provides leadership and direction to the District Managers, provides coordination with and between districts within the assigned geographical area.

If you would like more information or are interested in this role, please contact Annalise admin@arec.nz

AREC in the News!

"Lucky lost hunter located in the Hokonui Hills "

Please attribute to Invercargill Police SAR Coordinator Sergeant Ian Martin:

A Southland hunter was found after spending multiple hours lost in the cold in the Hokonui Hills last week.

Gore Police and Eastern Southland Land Search and Rescue team were alerted to the lost hunter on 21 April, after he used his mobile phone to raise the alarm with his wife, who in turn notified Police at about 6.30pm.



Police were able to determine the man's location by getting him to make a 111 call from his mobile phone.

Ten Eastern Southland LandSAR volunteers assisted and Amateur Radio Emergency Communications volunteers also responded to the call-out.

Three search teams walked through the area near Dolamore Park.

The hunter was located at about 10.30pm, four hours after staff were first notified.

He was feeling the cold, but otherwise in good health.

He was fortunate, as he had very little food and insufficient gear to spend the night in the bush.

Police would encourage hunters to always be prepared and take sufficient clothing and equipment for an unplanned overnight stay.

Police would also advise all hunters and outdoor users to take a Personal Locator Beacon (PLB) with them on all hunting and tramping trips.

A distress beacon lets you instantly signal for help and they work almost anywhere in the world.

The beacon shows rescuers your approximate location, taking the 'search' out of search and rescue.

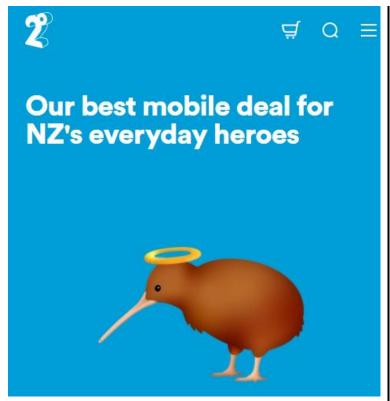
The sooner rescuers can help you, the more likely you are to survive.

Rescue Coordination Centre New Zealand works 24/7, 365 days of the year responding to all distress beacon activations.

The team acts quickly to find out as many details as they can about who set off the distress beacon and promptly send search and rescue teams to assist.

For more information on how to stay safe when hunting visit: https://www.police.govt.nz/advice-services/firearms-and-safety/firearms-safety/hunter-safety

Thanks to Lindsay Eunson ZL4LC for sharing.



AREC CEO Don Robertson ZL2TYR recently announced that 2Degrees has added AREC to their list of agencies eligible for Kiwi Hero discounts.

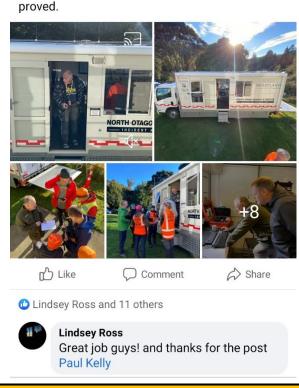
Simply head into a store with your AREC membership card to sign-up. More details can be found here:

https://www.2degrees.nz/mobile-plans/kiwi-hero-plan

Regional Manager Southern Lindsey Ross ZL4KS send the following from Dunedin LandSAR local identity and trainer Paul Kelly as posted on Facebook.



Another element of the SAR sector that is integral to all the events we do is the AREC who manage communications and SARtrack for us and fit seamlessly into using gear different groups proved.



AREC Brand Update

Regional Manager Northern, Andy Brill ZL1COP has been leading the work to rollout AREC branded uniform and PPE.

Andy explains "getting the right branding for AREC has been a keen initiative for us. We need to create look that is professional, and identifies us in our own right".

"A key part of the design work that AREC CEO Don Robertson ZL2TYR undertook earlier was to identify a colour combination that wasn't used already in the SAR sector. This is why the colour yellow features so heavily in our brand, and (as you can see from the polo shirt opposite) works in nicely with black or hi-vis yellow garments".

The priority for roll-out are existing SAR responders. Andy has worked closely with supplier NZ Safety Blackwoods to create a



range of garments to suit our needs. "This ranges from simple team wear, such as a cap and polo shirt, through to wet-weather gear and shirts and jackets for a more corporate look" says Andy.

Group Leaders have already received an e-mail from Andy looking for confirmation of who our existing SAR responders are. "Once we know who we are buying for, we will get the orders placed and start pushing the gear out there. The priority on SAR responders simply reflects that this is where our national funding comes from so we have to ensure the sector is getting the right return on investment".

We are working with our supplier to make online purchasing available, AREC National are finalising a policy on what items will be supplied and members will be welcome to purchase additional items if they wish.

Managing Fatigue

As volunteers, we don't think too much about fatigue as it relates to our radio activities. In fact, some will eagerly await "the call" and will think nothing of being called out on a Friday night after spending all week at work, stay awake all night and then even drive home the next day. It is no wonder that you fall asleep on the couch that afternoon.

One of our challenges is how we ensure we are sufficiently rested to carry out our tasks – both in our day-to-day lives as well as our spare time activities. Unfortunately for us, our callouts seldom happen when there is a gap in our diary and a window of time to prepare.

So what can we do about it?

Be Prepared – This is about knowing where your kit is, how to use it and making sure that batteries are regularly charged and that any adaptors that are borrowed are replaced. How many times have you or someone you know turned up without that that vital connector, cable or have the perfect radio for the job, with a flat battery? From a fatigue perspective, knowing where everything is and how to access it quickly will help reduce stress as you prepare to deploy.

Practise, Practise – The only way to be proficient is to use the gear. The same applies if it is your own personal equipment, or your local clubs or partner agencies. This is a key part of the training that we talk about. Training doesn't have to be formal – pooling your gear at the local club, walking or driving to nearby spots and using simplex to pass messages is a simple and effective way to practise both using your gear and operating technique.

Diet – Not surprisingly, diet is a big factor in how you feel. Have fresh fruit and nutritional snacks at hand so you can grab them on your way out the door. Leave the soft drink and potato chips for your next party.

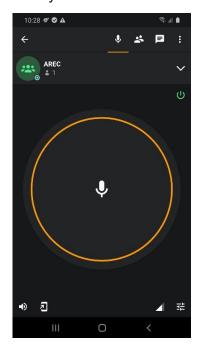
At a recent rally, I heard chatter on the repeater from one of our crew complaining that the McDonald's drivethru wouldn't be open in time. Compare this to the other crew who had packed a cooker, sausages and eggs and were looking forward to a leisurely breakfast in between the road closing and stage starting.

Manage your Time – This is about knowing that you can't work all week, drive 200km's on a Friday night, spend all day Saturday and Sunday at an event, drive home on a Sunday night and be back at work bright and early on Monday morning. Think about taking the Friday or the Monday off work – radio aside, you won't be any good to your employer if you fall asleep at your desk by 10am on your first day back!

Embrace Technology – I know of at least one AREC group who have been able to use ROIP tools to access their base radios from anywhere. With SARTrack and a remotely accessible radio, they can complete their tasks from home if they need to. This eliminated time on the road which can make all the difference for early starts / late finishes. They also have everything the need close at hand (including the kitchen!) which can reduce, anxiety, stress and fatigue.

Share the Load – We don't all have to do the 14-hour days, divide the work up into manageable shifts and work the allocations around individual commitments. If someone didn't finish work until 11pm the night before, they are probably not the best person to be on-site at 6am. And there is no point having six people hovering around the radio when two can do what's needed.

You are Responsible for You – Remember that we are each responsible for our actions. Yes, life is getting faster every day, but that means we have to be increasingly vigilant about what we commit to. And don't forget about family. For most of us, our loved one's support and respect what we do for the wider community. But we have to balance family, work and other activities – spending too much time on one and not balancing the others will soon come back to bite.





Many of you will have seen this photo on Social Media sites and, I am sure, would have either shaken your head or smiled to yourself. Yes, the safety glasses are an excellent idea, but aren't likely to help the burned hand.

But, if you take a step or two back, this is a very good illustration of "you don't know what you don't know" (a bit like me and kitset furniture – are those left-over parts extras or did I skip a step or two?). This is our opportunity around training (sorry to go back to that).

Ensuring our people are prepared with the technical and process know-how will ensure we don't get burned.

Finally on this point – don't let gender fool you. In my experience, women are more likely to ask questions and seek clarification before leaping in. Those of us who have been around a few years may need to ask a few more questions before making embarrassing mistakes.

I want to end by saying how much I enjoy talking to fellow AREC members about issues in the Health, Safety and Wellbeing space. Those of you still in work understand how much airtime is given to these topics.

Modern workplaces now understand that accidents are avoidable and that incidents actually directly and indirectly cost big money (and that thinking is helped along by significant legislative changes that hold business and their leadership personally accountable for workplace safety).

For those of you going to Napier, I look forward to the opportunity to catchup. If you want to reach out any anytime, drop me a note or give me a call.

David Wilkins ZL1MR AREC Health &Safety Advisor



Reporting

If you have any feedback from the frontline that may help others, or have an incident, near miss or injury to report please email the details with your contact number to HSW@arec.nz

Health and Safety is the responsibility of us all

Remember to:

STOP – In your mind you need to be constantly pausing and evaluating no matter the task or the location.

THINK – You need to think about what you see. Identify Hazards and associated Risk (the chance of it going wrong)

PLAN – Talk to others, compare notes, make a plan

COMMUNICATE – Brief the plan and plan to brief others as they arrive.

ACT – Execute the plan, monitor and review progress.